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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/165,034	10/01/1998	RICHARD J. NEELY	KCX-85-(1319	7380
22827	7590	11/12/2003	EXAMINER	
DORITY & MANNING, P.A.			PIERCE, JEREMY R	
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GREENVILLE, SC 29602-1449			1771	

DATE MAILED: 11/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/165,034

Applicant(s)

NEELY ET AL.

Examiner

Jeremy R. Pierce

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the corresponding address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 15 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7,9-12,14-16,27-50 and 59-78 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7,9-12,14-16,27-50 and 59-78 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. In view of the Appeal Brief filed on August 15, 2003, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

- (1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,
- (2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

### ***Response to Amendment***

2. In view of the withdrawal of finality, Applicant's After-final amendment submitted on April 15, 2003 is now entered. Claim 13 is cancelled. Claims 1, 12, 16, 27, and 25 have been amended. New claims 77 and 78 have been added. Claims 1-7, 9-12, 14-16, 27-50, and 59-78 are currently pending.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1, 2, 7, 9, 10, 15, 16, 27-32, 34, 35, 38-44, 49, 50, and 62-76 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alemany et al. (U.S. Patent No. 4,834,735) in view of Newkirk et al. (U.S. Patent No. 5,143,779).

Alemany et al. teach an absorbent article wherein the deposition region of its absorbent member comprises a storage zone and an acquisition zone having a lower average density and a lower average basis weight per unit area than the storage zone (Abstract). The ratio of the density between the storage zone and acquisition zone is about or greater than 2:1 (column 2, lines 52-60). The web comprises thermoplastic fibers because Alemany et al. disclose using polyester fibers (column 8, line 9). Alemany et al. teach calendering the web (column 18, lines 3-12), thus compressing it. However, Alemany et al. fail to teach the calendering process involves thermally bonding the fibers. Newkirk et al. disclose a nonwoven fabric that is both compressed and thermally bonded (column 4, lines 30-41). Newkirk et al. teach that such a nonwoven fabric has strength, softness, and compression resistance to make it suitable for use in absorbent products (column 3, lines 65-68). It would have been obvious to a person having ordinary skill in the art at the time of the invention to thermally bond the absorbent web of Alemany et al. in order to provide improved strength, softness, and compression, as taught by Newkirk et al. With regard to claims 9, 27 and 35, Alemany et al. disclose the basis weights to be between 0.02 and 0.186 g/cm<sup>2</sup> (column 13, line 66) for the storage zone and between 0.015 and 0.1 g/cm<sup>2</sup> for the acquisition zone

(column 14, line 49), and  $1 \text{ g/cm}^2$  is equal to about 295 oz/yd<sup>2</sup>. Further regarding claim 35, Alemany et al. disclose additional layers (column 4, lines 25-27). With regard to claims 2, 27, 34, and 38, Alemany et al. do not teach the web to comprise a spunbonded web. Newkirk et al. disclose the nonwoven layer can be made from a spunbonded web (column 4, line 33). It would have been obvious to one skilled in the art to manufacture the absorbent web of Alemany et al. by spunbonding rather than airlaying in order to provide a stronger, continuous fabric material. With regard to claims 7 and 30, Newkirk et al. disclose using polypropylene for the spunbonded web (column 4, line 67). With regard to claims 10, 16, and 31, Newkirk et al. teach using crimped fibers offer increased loft in the nonwoven web and bicomponent fibers are easily crimpable (column 4, lines 57-62). With regard to claim 15, Alemany et al. make the web by airlaying (column 18, line 4). With regard to claim 32, the first area would comprise 25 to 75% of the web (Figure 3). With regard to claim 39, the topsheet can comprise a spunbonded web (column 5, line 12), which could be considered the third layer. With regard to claim 40, Alemany et al. disclose the backsheet can be polyethylene film (column 5, lines 26-27). With regard to claim 41, Alemany et al. disclose the topsheet can be non-woven (column 5, line 11). With regard to claims 42 and 44, Alemany et al. disclose the article can be a disposable diaper or personal care product (column 1, lines 52-53). With regard to claim 43, Alemany et al. do not disclose the articles useful as a wiper product. It would have been obvious to one skilled in the art to use the absorbent material disclosed by Alemany et al. as a wiper product, since it is well known within the art that absorbent articles useful in personal care products and diapers can also be

employed as a wiper product. With regard to claim 49 and 50, the acquisition zones extend in both the machine and cross machine direction in the form of various shapes (column 17, lines 1-12). With regard to claims 62, 65, 66, 69, 70, 73, Newkirk et al. disclose through-air bonding followed by calendaring (column 6, lines 29-33). With regard to claims 63, 67, and 71, Newkirk et al. disclose that pattern bonding has an attractive balance of loft, softness, and strength (column 6, lines 8-18). With regard to claims 64, 68, and 72, through-air bonding after calendaring is an alteration of the processing steps that would not create a materially different product.

5. Claims 3-6, 11, 33, 37, 48, and 59-61 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alemany et al. in view of Newkirk et al. as applied to claims 1, 27, and 35 above, and further in view of Karami (U.S. Patent No. 4,027,672).

Alemany et al. do not disclose the lower basis weight area and the higher basis weight area to form a repeating pattern of alternating columns. However, this pattern is already known in the art of absorbent webs. Karami teaches various patterns of densified regions in a nonwoven absorbent pad, including alternating columns (Figure 8) and where the first area surrounds the second area (Figure 5). It would have been obvious to one skilled in the art to use the densified patterns disclosed by Karami in the absorbent pad of Alemany et al. in order to derive the absorbing and transporting properties in the patterned web taught by Karami. With regard to claim 6, it would have been obvious to one skilled in the art to include alternating rows of densified regions as well as alternating columns in order to further increase the variance in absorbing and

transporting properties of the web. With regard to claim 11, Karami shows the densified and undensified portions to exist in a 1:1 ratio (Figure 8).

6. Claims 12, 14, 36, 45-47, 77, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Alemany et al. in view of Newkirk et al. as applied to claims 1, 27, and 35 above, and further in view of Morman (U.S. Patent No. 5,611,879).

Neither Alemany nor Newkirk disclose using both pulp fibers and polymeric fibers in the absorbent web. Also, neither reference discloses using meltblown fabrics for the web. Morman discloses that spunbond, meltblown, and coform webs may all be used in absorbent articles (column 4, lines 9-28). It would have been obvious to a person having ordinary skill in the art at the time of the invention to use meltblown or coform webs in the absorbent article of Alemany et al., since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

### ***Response to Arguments***

7. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

8. Applicant argues that Alemany teach away from thermal bonding. However, Alemany do not explicitly teach to avoid thermal bonding. Alemany discloses that one embodiment of the invention may use a web made from the EP 122,042, which happens to be substantially unbonded, but a single embodiment of the entire invention

does not indicate a teaching away from thermal bonding. Motivation for thermal bonding the web of Alemany has been set forth in the new rejection above.

9. Applicant argues that Newkirk is directed to coverstock or spacer fabrics in absorbent products and that Newkirk does not disclose an absorbent layer. However, Newkirk discloses the nonwoven fabric is suitable for use in absorbent products (column 3, line 6, especially as coverstock and spacer fabrics (column 4, line 6). Newkirk teach that spacer fabrics provide liquid acquisition, distribution, and wicking functions (column 2, line 3). Similarly, Alemany teaches the absorbent web of his invention also provide advantageous acquisition, distribution, and wicking properties (column 2, lines 12-20). Thus, both webs of Alemany and Newkirk are designed to acquire and distribute fluid in an absorbent article. Additionally, spacer layers are often thought of as being a part of the core layer of an absorbent article in the art (see U.S. Patent No. 5,360,420 to Cook et al., column 4, lines 15-41).

### ***Conclusion***

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: U.S. Patent No. 4,755,413 to Morris. This patent discloses that absorbent cores comprising conjugate synthetic fiber, cellulosic fibers, and superabsorbent may be thermally bonded to enhance absorbency (column 5, lines 27-55).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeremy R. Pierce whose telephone number is (703)



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605-4243. The examiner can normally be reached on Monday-Thursday 7-4:30 and alternate Fridays 7-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (703) 308-2414. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

JRP  
jrp

*Eugene M. Cole*  
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PRIMARY EXAMINER